

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1-45. (canceled)

46. (previously presented) A device comprising:

a demultiplexer configured to receive a channelized synchronous optical network (SONET) data stream and separate the channelized SONET data stream into constituent tributary data streams, the tributary data streams simultaneously including:

a packet over SONET (POS) tributary data stream, and

an asynchronous transfer mode (ATM) tributary data stream; and

a line card coupled to the demultiplexer and configured to provide the demultiplexer with the channelized SONET data stream.

47. (previously presented) The device of claim 46, wherein the channelized SONET data stream is received over a single optical fiber.

48. (previously presented) The device of claim 46, wherein the tributary data streams additionally include a Point to Point Protocol (PPP) over a DS tributary data stream.

49. (previously presented) The device of claim 46, wherein the channelized SONET data stream has an optical carry (OC) rate in accordance with the SONET standard.

50. (previously presented) The device of claim 46, wherein the POS tributary data stream has an optical carry rate in accordance with the SONET standard.

51. (previously presented) The device of claim 46, wherein the ATM tributary data stream has an optical carry rate in accordance with the SONET standard.

52. (previously presented) The device of claim 46, wherein the tributary data streams additionally include:

a composite tributary data stream that includes a POS tributary data stream and an ATM tributary data stream.

53. (previously presented) One or more devices in a data processing environment comprising:

a multiplexer configured to simultaneously receive tributary data streams including:

a packet over synchronous optical network (POS) tributary data stream, and

an asynchronous transfer mode (ATM) tributary data stream,

the multiplexer being further configured to combine the simultaneously received tributary data streams into a single channelized synchronous optical network (SONET) data stream; and

a line card coupled to the multiplexer and configured to receive the single channelized SONET data stream.

54. (previously presented) The one or more devices of claim 53, wherein the simultaneously received tributary data streams additionally include a Point to Point Protocol (PPP) over a DS tributary data stream.

55. (previously presented) The one or more devices of claim 53, wherein the channelized SONET data stream has an optical carry (OC) rate in accordance with the SONET standard.

56. (previously presented) The one or more devices of claim 53, wherein the POS tributary data stream has an optical carry rate in accordance with the SONET standard.

57. (previously presented) The one or more devices of claim 53, wherein the ATM tributary data stream has an optical carry rate of in accordance with the SONET standard.

58. (previously presented) The one or more devices of claim 53, wherein the simultaneously received tributary data streams additionally include:

a composite tributary data stream that includes a POS tributary data stream and an ATM tributary data stream.

59. (previously presented) A forwarding node for directing data in a network, the forwarding node including:

means for creating at least two simultaneous tributary synchronous optical network (SONET) data streams, the at least two simultaneous tributary SONET data streams including:

a packet over synchronous optical network (POS) tributary data stream,
and

an asynchronous transfer mode (ATM) tributary data stream; and
means for transmitting the at least two simultaneous tributary SONET data streams as a single SONET data stream.

60. (previously presented) The forwarding node of claim 59, wherein the at least two simultaneous tributary data streams additionally include a Point to Point Protocol (PPP) over a DS tributary data stream.

61. (previously presented) The forwarding node of claim 59, wherein the single SONET data stream has an optical carry (OC) rate in accordance with the SONET standard.

62. (previously presented) The forwarding node of claim 59, wherein the POS tributary data stream has an optical carry rate in accordance with the SONET standard.

63. (previously presented) The forwarding node of claim 59, wherein the ATM tributary data stream has an optical carry rate in accordance with the SONET standard.

64. (previously presented) The forwarding node of claim 59, wherein the at least two simultaneous tributary data streams additionally include:

a composite tributary data stream that includes a POS tributary data stream and an ATM tributary data stream.

65. (previously presented) A method for transmitting information over a fiber optic cable, the method comprising:

constructing a packet over synchronous optical network (POS) data stream;
constructing an asynchronous transfer mode (ATM) data stream;
combining the POS data stream and the ATM data stream into a single channelized synchronous optical network (SONET) data stream; and
transmitting the single SONET data stream.

66. (previously presented) The method of claim 65, wherein the single SONET data stream is transmitted over a single fiber optic cable.

67. (currently amended) The method device of claim 65, wherein the channelized SONET data stream has an optical carry (OC) rate in accordance with the SONET standard.

68. (currently amended) The method device of claim 65, wherein the POS tributary data stream has an optical carry rate in accordance with the SONET standard.

69. (currently amended) The method device of claim 65, wherein the ATM tributary data stream has an optical carry rate in accordance with the SONET standard.